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Because some researchers have suggested that dogmatism, or open or closed mindedness, on the part of faculty and students influences the marks students receive, this study aimed to determine the extent to which a congruence of teachers' and students' beliefs and goals is reflected in grades. To guide the investigation, a number of questions were put forth relating to whether teachers tend to prejudge students on the basis of compatibility with their personal values. Conducted at the State University of NY at Buffalo, questionnaires were administered to 792 students pursuing a preparatory program to teach on the elementary and secondary level and 26 of their teachers. Rokeach's Dogmatism Scale and an adaptation of the life goals from Getzels and Jackson were used. At mid-semester, faculty also completed another questionnaire asking them to rank their students as above average, average, or below average without reference to grade books or other sources. The findings were first that open and closed minded students taught by open and closed minded teachers did not receive a significantly different grade distribution. Second, students who shared the same goals as their teachers received about the same distribution of grades as those whose goals differed. Third, when beliefs AND goals correspond, grades tended to show a certain pattern. Grade discrimination only seems to appear when beliefs and goals are considered together. Class ranking did not seem to be influenced by mutual agreement on goals. Evidence indicated that class participation may be a deciding factor affecting faculty evaluation of students. (JS)

AN EXPLORATORY STUDY OF THE RELATIONSHIPS OF BELIEF SYSTEMS, GOALS, AND THE EVALUATION OF COLLEGE UNDERGRADUATES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Background: Ebel, Alexander, Getzels and Jackson, Battle, Rokeach and others have suggested that dogmatism or "open and closed mindedness" may be directly involved in the biases and idiosyncrasies that serve to influence marks given as a result of teacher-pupil relationships in the learning situation.

Problem: The problem deals with the congruence of belief systems and goal orientation and the relationship to levels of student achievement as reflected in marks assigned at the end of a course. The purpose of the study is to determine the extent to which congruence of belief systems of students and of teachers, interacting with similarity of goal orientation of the same students and teachers, influences the final mark given in a course in teacher education on the undergraduate level. Since the present study was exploratory, a number of general questions were stated to give direction to the investigation.

1. Is the grading of students influenced by belief-system orientations of students and faculty? Will the grades that open minded students receive from their respective open minded faculty, the grades that open minded students receive from their respective closed minded faculty, the grades that closed minded students receive from their respective closed minded faculty and the grades that closed minded students receive from their respective open minded faculty differ significantly?

2. Will students who have high agreement with their respective faculty on goal selection receive higher grades than students having low agreement with their respective faculty?

3. Is the grading of students influenced by the belief-system orientation of students and faculty combined with agreement or disagreement between faculty and students on goals? That is, will all the combinations of groups resulting from the variables of open and closed minded students, open and closed minded faculty, and high and low agreement on goals, differ significantly in the distribution of grades?

4. When faculty are asked to rate students, prior to final grade time, as to being above average, average, or below average, are such ratings affected by the belief-system orientations of students and their respective faculty members?

In general, the question was whether or not faculty prejudge students as high, average, or low on the basis of belief-system congruence or its converse; and whether or not final grades issued by faculty may be a function of belief-system and goal orientation compatability or its converse.

Procedures: The study was conducted at the State University College at Buffalo, New York during the second semester of the 1964-65 academic year. It was decided to limit this pilot effort to students pursuing a preparatory program to teach on the elementary and secondary levels. The faculty were likewise limited to those teaching courses that were a part of the undergraduate professional sequence in teacher education.

Twenty-six faculty and 792 students were administered Rokeach's Dogmatism Scale and an adaptation of the life goals from Getzels and Jackson. Midway through the semester faculty were asked to complete another questionnaire. They were asked to rate each of their students as being above average, average, or below average; ratings were to be general impressions of the student without reference to grade books or other sources. At the end of the semester final grades were collected for each student subject.

Student Sample: The total sample of 792 students scored on the average 140.76 with a standard deviation of 27.59 on the D Scale. This compares well with a sample of 742 students at the State University of New York at Albany where the mean was 141.07 and standard deviation 24.16 (Conway, 1963). Rokeach (1960) also has similar results with samples at the Ohio State University.

Faculty Sample: The mean score on the D Scale of the twenty-six faculty Ss was 129.04 with a standard deviation of 20.19. While this mean is considerably lower than the student sample it is not surprising, for Rokeach (1960) notes somewhat of an inverse correlation between the D Scale and amount of education. Included in the faculty sample were wide variations in age, education, and experience. However, the only variable considered for selecting the Faculty S was whether or not they were teaching a class or classes at the time of this study and whether or not they were willing to participate.

Definitions: In order to analyze the data relevant to the questions posed earlier, certain operational definitions were employed. They are:

1. Closed Faculty (CF) - those faculty Ss who scored in the top quarter of the faculty tested on the D Scale (Range 148 to 173).
2. Open Faculty (OF) - those faculty Ss who scored in the bottom quarter of the faculty tested on the D Scale (Range 108 to 97).
3. Closed Students (CS) - those student Ss who scored in the top quarter of the students tested on the D Scale (Range 158 to 208).
4. Open Students (OS) - Those students who scored in the bottom quarter of the students tested on the D Scale (Range 124 to 49).
5. High Agreement on Goals (HIAG) - those students who agreed with their particular faculty member in the ranking of nine or more of the thirteen goals.
6. Low Agreement on Goals (LOAG) - those students who agreed with their particular faculty member in the ranking of five or less of the thirteen goals.

Results: The first finding was that open and closed students, who were taught by open and closed teachers, did not receive significantly different numbers of A's, B's, C's, D's and E's (chi square). Similar results were obtained from the second question, that is, students who were in high agreement with their teacher's goals did not differ in grades received from those students having low agreement.

However, when belief system agreement and goal agreement were considered together, then a number of significant results appeared. Table I shows that the groups listed differed significantly at the .05 level for the distribution of grades. Table II shows the two combinations that contributed most heavily to the significance. When closed minded students, regardless of whether their faculty member was open or closed as long as they were in LOW agreement with that instructor, were compared

with other students who were in HIGH agreement with their respective open or closed faculty members, we again found a significantly different distribution of grades.

When the last question was considered, that is the mid-semester ranking of students as above average, average, or below average, it was found that closed and open faculty ranked their closed and open students significantly different. Closed and open faculty considered together assigned significantly more above average ratings to the closed students than to the open students. When considered separately it was found that the closed faculty ranked their closed students higher than their open students; on the other hand, open faculty did not differ in their ranking of open and closed students.

Last of all, agreement or lack of agreement on goals between students and faculty did not seem to influence the rank that students received in the mid-semester rating process. (Tables III and IV form the basis for the above).

Conclusions: There are no hard and fast definitive conclusions that can be drawn from this study. The subjects, both faculty and students, were restricted to the field of Education; this in conjunction with the size of the sample lends too much to the possibility of spurious outcomes.

However, the exploratory function of the study was fulfilled in that some interesting implications for further investigation did emerge. In particular the results lend credence to the possibility that closed minded students are receiving higher evaluations than open minded subjects. Open and closed mindedness on the part of the faculty seems to have an indirect effect on final grades. At the mid-semester ranking the open minded instructor does not discriminate in his estimates of the extreme open or closed minded student; the closed minded teacher does seem to identify more closed minded students as being above average. It would seem plausible that expectations of student performance would be manifested in the final grades assigned.

Grade discriminations only seem to appear when the belief system variable and the goal agreement variable are considered together. The greatest differences occur in favor of those students who are closed minded and are in low agreement with the goals of their teachers. Since neither variable considered alone seems to discriminate, what is it about the combination that might influence the outcomes noted? Speculation at this time seems to favor "participation" as a possible key.

It is possible that some topics treated in education courses could be threatening to the belief system of closed minded persons (child-rearing practices, permissiveness, etc.). Perhaps the low agreement in goals between student and teacher is just such an indication of threatening belief system content. To protect a threatened belief system the closed minded person will attempt to ward off the threats (Rokeach, 1960). Conway (1967) argues that where all members of a group are predominantly closed minded, then threats may be reduced by refusing to contribute to the situation. However, in mixed groups, which are more expected in the classroom, the closed minded person can ward off threats by externalizing irrelevant internal pressures, by vocalizing or verbalizing with frequency so as to direct the discussion away from the emerging threat.

Could it be that the closed minded students in low agreement with their instructor's goals, were quite verbal in the class situation? Further, could it be that these vocal students become quite visible through their class participation and as such, are looked

upon with favor by their individual teachers? It may well be that faculty, regardless of whether they are open or closed minded themselves, tend to reward classroom participation first of all, by seeing such students as "above average," and secondly, by allowing such mid-semester estimates to influence the assignment of final grades.

Alexander, Eugene O. "The Marking System and Poor Achievement." The Teachers College Journal 36: 110-113; December, 1964.

Battle, Haron J. "Relation Between Personal Values and Scholastic Achievement." J. of Experimental Education 26: 27-41; September, 1957.

Conway, James A. "Problem-Solving in Small Groups as a Function of 'Open' and 'Closed' Individual Belief Systems: Some Implications for Development of Administrative Theory." Unpublished Doctoral Dissertation, State University of New York at Albany, 1963.

Conway, James A. "Problem-Solving in Small Groups as a Function of 'Open' and 'Closed' Individual Belief Systems." Organizational Behavior and Human Performance, 2: 394-405; November 1967.

Dressel, Paul L. and Lehmann, Irvin J. "The Impact of Higher Education on Student Attitudes, Values, and Critical Thinking Abilities." The Educational Record, 46: 248-58; Summer 1965.

Ebel, Robert L. Measuring Educational Achievement. New Jersey: Prentice-Hall, Inc., 1965.

Getzels, Jacob W., and Jackson, Philip W. Creativity and Intelligence. New York: John Wiley and Sons, 1962.

Palmer, Orville. "Seven Classic Ways of Grading Dishonestly." English Journal, 51: 464-67,; October 1962.

Rokeach, Milton. The Open and Closed Mind. New York: Basic Books, Inc., 1960.

Table 1

Faculty-Student Belief Systems With Goal Agreements and Grades Received by Students

Groups	Grades A's & B's	Grades C's, D's, & E's	Total
CS(CF)/HIAG	5	4	9
OS(CF)/HIAG	9	3	12
CS(OF)/HIAG	3	12	15
OS(OF)/HIAG	10	8	18
CS(CF)/LOAG	12	2	14
OS(CF)/LOAG	8	5	13
CS(OF)/LOAG	8	6	14
OS(OF)/LOAG	7	4	11

$X^2 = 14.51211$ w/Yates correction df = 7 significant at .05

Table II

Combinations of Faculty-Student Belief System and Goal Agreement Groups with Grade Distributions

Group Combination	Grades A's & B's	Grades C's, D's, E's	Significance
CS(CF)/LOAG	12	. 2	.01
CS(OF)/HIAG	3	12	
CS(LOAG)	20	8	.01
CS(HIAG)	8	16	

Table III

Student-Faculty Belief Systems and Ranking of Students

Groups	Ranks Above Average	Average	Below Average	Totals
CS/CF	21	22	9	52
OS/CF	9	39	8	56
CS/OF	24	24	7	55
OS/OF	20	36	3	59

$X^2 = 16.8790$ df = 6 significant at .01 level

Table IV

Combinations of Student-Faculty Belief Systems and Ranking of Students

Group Combinations	Ranks			Significance
	Above Avg.	Avg.	Below Avg.	
CS/CF & OF	45	46	16	.01
OS/CF & OF	29	75	11	
CS/CF	21	22	9	.01
OS/CF	9	39	8	
CS/OF	24	24	7	N.S.
OS/OF	20	36	3	
OS/CF	9	39	8	.05
OS/OF	20	36	3	
OS/CF	9	39	8	.01
CS/OF	24	24	7	